ABSTRACT OF THE DISCLOSURE

A surface plasmon resonance measuring apparatus is provided with a dielectric block, a metal film formed on a surface of the dielectric block, a light source for emitting a light beam, an optical system for making the light beam enter the dielectric block at various angles of incidence so that a condition for total internal reflection is satisfied at an interface between the dielectric block and the thin film layer, and a photodetector for detecting the intensity of the light beam satisfying total internal reflection at the interface. In the measurement chip to be utilized in the surface plasmon resonance measuring apparatus, the dielectric block is formed from a synthetic resin in which, when said light beam is p-polarized outside said dielectric block and then strikes the interface, the intensity of a s-polarized component at the interface is 50% or less of the intensity of the light beam at the interface.